

*A2*

The electrical connections of the LEDs, known as lead frames 44, are connected to respective positive and negative power terminals or bus bars 42. Preferably, these terminals are adapted to serve the dual function of heat sinks to help remove heat generated by the LEDs 43. Thus, the terminals are formed of a good thermal conductor such as copper, and are located in the optimum location relative to the LEDs and the external surfaces of the device. In one particular embodiment most suited to the LED array of Figure 3, the terminals 42 take the form of two concentric rings, each lying adjacent to the bases of one ring of LEDs 31 or 32. Preferably, the negative terminal is the outer one because the lead frames 44 to the negative terminal of the LEDs generally get hotter than the lead frames 44 to the positive terminal of the LEDs.

Amend the paragraph starting at line 4 on page 10, to read as follows: ✓

*A3 Sub B1*

In another embodiment of the invention, illustrated in Figure 6, two or more adiabatic tapered light guides 41' are arranged in series, each with a corresponding cluster of LEDs 43', but with successive clusters forming a ring around the end of one light guide as it connects to the next. Alternatively, each successive ring of LEDs 43 may be replaced by just one or a fewer number of LEDs. This arrangement allows the overall diameter of the device to be kept relatively small as the LED clusters 43 are arranged in groups along the length of the device.

Amend the paragraph starting at line 4 on page 14, to read as follows: ✓

*A4 Sub B3*

Figure 5 shows a device according to the invention which incorporates a light guide 41 and cluster of LEDs 43 as shown in Figure 4 together with a heat pipe 45 as a single lumen in the main body 54 of the device. The hotter of the LED leads is preferably placed nearer the heat pipe 45 or outer case 47 of the LED cluster so that the heat path of the hotter lead is shorter. ~~A thermal connector 48 may be provided between the LEDs 43 and the end of the heat pipe 45.~~ If required, additional forced cooling means may be used for example, a fan 49 or Peltier device 50 in juxtaposition to the pipe. In addition, a heat sink 51 may be provided.

Amend the paragraph starting at line 20 on page 14, to read as follows: ✓